



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the U.S. Patent Application of:

Inventor(s) : **Jeffrey A. Hubbell, et al.**

Serial No. : **09/910,663**

Filed : **July 19, 2001**

Examiner : **Peter Szekely**

Art Unit : **1714**

For : **Gels for Encapsulation of  
Biological Materials**

CERTIFICATE OF MAILING

May 6, 2003

Date of Deposit

I hereby certify that this paper or fee is being deposited with the United States Postal Service as First Class Mail on the date indicated above and is addressed to the Assistant Commissioner of Patents, Washington, D.C. 20231.

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AMENDMENT & RESPONSE

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This paper is being filed in response to the Office Action mailed November 6, 2002. Applicants request a three month extension of time to respond to the Office Action. Enclosed is a check for \$930.00 to pay for the extension of time. Please charge any additional fee required by the filing of this paper, and credit any overpayment, to Account No. 09-0946.

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AMENDMENT

Please amend the specification on page 1, lines 2-9, to read as follows:

This application is a Continuation of 08/510,089, (abandoned) filed August 1, 1995, which is a CIP of 07/958,870 (abandoned), filed 10/7/92, which is a CIP of 07/870,540 (abandoned), filed 4/20/92; 08/510,089 is also a CIP of 08/379,848, filed 1/27/95, which is a continuation of

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cont.*

08/022,687 filed 3/1/93 and issued as U.S.P.N. 5,410,016, which is a CIP of 07/843,485, filed 2/28/92 (abandoned); 07/958,870 is also a CIP of 08/336,393, filed 11/10/94, which is a continuation of 07/598,880 (abandoned), filed 10/15/90, each of which is incorporated herein by reference.

## RESPONSE

### Priority

The examiner has stated that the present application has an effective filing date of August 1, 1995, because one of the priority applications of the present application, U.S. Patent Application 07/870,540 (the '540 application), filed April 20, 1992 (now abandoned) allegedly does not contain any subject matter regarding a biocompatible mixture containing at least one ionically crosslinkable component and at least one covalently crosslinkable component. Applicants respectfully traverse this rejection.

Claim 19, the only claim pending in the present application, reads as follows:

A crosslinkable biocompatible mixture comprising: at least one ionically crosslinkable component; and at least one covalently crosslinkable component, wherein the ionically crosslinkable component is selected from a polysaccharide, a polyanion, or polycation.

First, as can be seen from the text at the top of page 1, lines 1-9, of the specification, priority for this application goes back at least as far as February 28, 1992, when U.S. Patent Application No. 07/843,485 (the '485 application) was filed. The '485 application contains subject matter regarding a biocompatible mixture containing at least one ionically crosslinkable component and at least one covalently crosslinkable component. For example,

A crosslinkable biocompatible mixture comprising	page 15, lines 9-12 page 20, lines 30-35 page 22, lines 29-32	"hydrogels" and "biocompatibility"
at least one ionically crosslinkable component; and	page 16, lines 19-22 page 27, lines 2-5	hyaluronic acid, gelatin, alginate, other polysaccharides

at least one covalently crosslinkable component,	page 16, lines 19-22 page 27, lines 8-11	acrylated hyaluronic acid, acrylated gelatin
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This chart demonstrates that there is support for "a biocompatible mixture containing at least one ionically crosslinkable component and at least one covalently crosslinkable component" in the '485 application. As a result, applicants request that the examiner acknowledge the priority date of at least as early as February 28, 1992 for the present application.

**Rejection of Claim 19 Under 35 USC § 102 (b)**

The examiner states that claim 19 is anticipated under 35 USC § 102 (b) by Nisshinbo Industries, Inc., EP 0555980. Applicants respectfully traverse this rejection. Applicants note that on the cover page of EP 0555980, the date of publication of the application was August 18, 1993. This date is clearly after February 28, 1992, removing Nisshinbo from the classification of prior art to the present application. Therefore, applicants request that this rejection be withdrawn.

**Rejection of Claim 19 Under 35 USC § 102 (e)**

The examiner has rejected claim 19 as anticipated under 35 USC § 102 (e) by Desai et al. 5,334,640 (the '640 patent), Desai et al. 5,550,178 (the '178 patent), Soon-Shiong et al. 5,705,270 (the '270 patent), Soon-Shiong et al. 5,700,848 (the '848 patent), Gunther et al. 5,736,595 (the '595 patent), Soon-Shiong et al. 5,873,747 (the '747 patent), Soon-Shiong et al. 5,846,530 (the '530 patent), or Mathiowitz et al. 5,985,254 (the '254 patent).

Applicants respectfully traverse this rejection. As noted above, the present application is entitled to a priority date of at least as early as February 28, 1992. As such, it is prior to each of the pieces of alleged prior art cited by the examiner: the '640 patent has a priority date of April 8, 1992; the '178 patent has an effective priority date of April 8, 1992; the '747 patent has a § 102 (e) date of October 29, 1992, and the '848, '270 and '530 patents, being divisionals of the '747 patent, all have an effective filing date of October 29, 1992; the '595 patent has a § 102 (e) date of November 3, 1995; and the '254 patent has a filing date of June 7, 1995. Each of these dates is later than February 28, 1992.

Applicants therefore request that this rejection be withdrawn.

**Rejection of Claim 19 Under 35 USC § 101 – Double Patenting**

The examiner has rejected claim 19 under 35 USC § 101 as claiming the same invention as claim 1 of the '640 patent. This rejection is respectfully traversed. The rejection for § 101 double-patenting is improper because claim 19 in the present application may be literally infringed without claim 1 of the '640 patent being literally infringed. Specifically, a biocompatible material which is cross-linkable but not cross-linked will literally infringe claim 19, without literally infringing claim 1 of the '640 patent. Therefore, the cross-readability test of *In re Vogel*, 422 F.3d 438, 441, 164 USPQ 619, 622 (CCPA 1970), is not met with respect to double patenting between the claims. *See also* *Shelcore v. Durham Indus.*, 745 F.2d 621, 223 USPQ 584 (Fed. Cir. 1984) (reaffirming *Vogel* test). The claims therefore do not recite the same invention under § 101.

Applicants request that this rejection be withdrawn.

**Rejection of Claim 19 Under Judicially Created Doctrine of Obviousness Type Double Patenting**

The examiner has rejected claim 19, under the judicially created doctrine of obviousness-type double patenting, as unpatentable over claim 1 of the '640 patent.

The rejection for judicial obviousness-type double patenting between claim 19 of the present application and claim 1 of the '640 patent is improper because issuance of claim 19 would not give rise to an unjustified extension of the rights granted in the '640 patent. MPEP § 804 I-A. The fact that both the present application and the '640 patent have inventors who are not in common with the other constitutes "*prima facie* evidence" that the invention in claim 19 was "by another" inventive entity than the invention of claim 1 of the '640 patent. MPEP § 2136.04. Inventorship of claims is "generally" different where there are different inventive entities, even if there is one inventor in common. MPEP § 2137.01.

Moreover, the common inventor between the claims of the present application and the claims of the '640 patent, Neil Desai, is not the sole inventor of the subject matter of claim 19 of the present application. As the remaining inventors (other than Desai) in the present application are not named as inventors on the '640 patent, and at least one of these inventors named in the present application is also an inventor of claim 19, the inventive entities for claim 19 and for claim 1 of the '640 patent

must be different. Therefore, because the two claims have different inventive entities, there is no double patenting issue.

Applicants request that this rejection be withdrawn.

**CONCLUSION**

In light of the amendments and the discussion above, applicants believe that claim 19 is now in form for allowance, and request that the examiner allow the claim. If contact with the undersigned would in any way assist the examiner in the determining patentability of the claim, the examiner is invited to contact the undersigned at the address, telephone number, or fax number listed below.

Respectfully Submitted,



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**TEXT TO SHOW AMENDMENTS**

This application is a Continuation of 08/510,089, (abandoned) filed August 1, 1995, which is a CIP of 07/958,870 (abandoned), filed 10/7/92, which is a CIP of 07/870,540 (abandoned), filed 4/20/92; [this] 08/510,089 is also a CIP of 08/379,848, filed 1/27/95, which is a continuation of 08/022,687 filed 3/1/93 and issued as U.S.P.N. 5,410,016, which is a CIP of 07/843,485, filed 2/28/92 (abandoned); [this] 07/958,870 is also a CIP of 08/336,393, filed 11/10/94, which is a continuation of 07/598,880 (abandoned), filed 10/15/90, each of which is incorporated herein by reference.